

Experiment 2 Report Guidelines

1 Content and Evaluation

The following breakdown of marks will be used when evaluating your report. Keep this in mind when planning and writing.

1. Introduction (10%)
 - Write 2–3 paragraphs summarizing, in your own words, what were the objectives of this experiment and what were the main results.
2. Experimental Setup (15%)
 - Describe how you collected the traces you used in the experiment. Where was your machine located? Where was the server located? What kind of network connection did your machine have? Were you uploading or downloading to the server? At what time of day and on what day of week was the packet capture collected? Are there other factors that might have influenced what you observed?
3. TCP Behavior Comparison (15%)
 - Perform the tasks and address all of the points mentioned under list item 1 in Section 3.2 of the Lab 2 instructions. This covers comparing the TCP congestion window behavior observed in your traces to the theoretical behavior discussed in the Kurose and Ross textbook and in ECSE 416 lectures.
4. TCP Throughput Analysis (35%)
 - Perform the tasks and address all of the points mentioned under list item 2 in Section 3.2 of the Lab 2 instructions. This covers evaluating the Mathis et al. theoretical throughput model using the traces you collected.
5. Discussion (10%)
 - Close with a brief discussion of the main outcomes of this experiment. What were your main results? What were the challenges you encountered? What are your explanations for what you have observed? What is your reasoning?
6. Formatting and Presentation (15%)
 - These marks are related to all of the issues mentioned in the next section.

2 Length and Basic Formatting

Use an 11 point serif font such as Cambria, Computer Modern, Droid Serif, or Times New Roman. Use 1 inch margins and single line spacing. The first page should include the names and ID numbers of both lab partners, your group number. It should also include the words “ECSE 416 Experiment 2 Report” and the date. You do not need to have a separate title page; this information should simply appear at the top of the first page.

All pages should be numbered. Also make sure to number all sections, subsections, figures, tables, and references appropriately, so they can be easily referred to from within the body (text) of your report.

There is no page limit for your report. You should address the points listed below completely and succinctly. If your report (excluding appendices) is going to exceed 10 pages, please contact the instructor.

Please upload your report in Adobe PDF format (not doc or docx).

2.1 Structure and Organization

Divide your report logically into sections and subsections. Use paragraphs to separate one idea from another. See Section 2 below for more about what content to include in the report.

2.2 Grammar, Language, and Style

Write in complete sentences. Avoid using long bulleted lists. Avoid grammatical and typographical mistakes. Use italic font to *emphasize* a point. **Boldface** should only be used for titles (of sections, subsections, ...). Make sure to proofread your report before submitting it, and use spellcheck.

2.3 Figures, Graphics, and Tables

Figures and tables should be referenced and discussed from within the body of your report. Rather than writing, “The figure below shows the routes from X to Y,” you should write something like, “Figure 1 shows the routes from X to Y.” This avoids ambiguity (e.g., if there are multiple figures below), and also makes it easier to refer to the figure or table at a later point in the report (e.g., to make a comparison to other results).

Graphics (including screen shots) should be legible. Make sure any text in your figures uses a font size which is similar to the font in the rest of the document. Also make sure lines are thick enough to view. We shouldn’t need to zoom in 800x to read text or see lines in a figure. Color can be very useful, especially in figures. Avoid colors that may be difficult to see on screen, such as bright yellow.

Every figure and table should be numbered and should have a caption, providing enough information that a knowledgeable reader can just look at the caption and understand what is being shown in the figure or table. Every figure and table should also be mentioned somewhere within the main body of the report, so that the reader knows where the figure or table fits into the discussion.

2.4 External Sources

If you gathered information from any sources to help with answering the questions in this lab (e.g., the Kurose and Ross textbook, other books, websites), your report should include a References section at the end (before the appendices) listing and numbering all references used. If you list an external source as a reference, you must also refer to it (by number) at the point(s) in the report where the information from the source is relevant.

2.5 Supporting Documents

You are not required to upload any other documents for this lab. If you kept the traces from your Wireshark experiments and would like to submit them with your report, you may upload them as separate files in myCourses.

As always, if you have any questions about the information in this document, don’t hesitate to contact the course staff.